



**UNIVERSITI PUTRA MALAYSIA**

**THOUGHT PROCESSES AMONG TEACHERS TEACHING SPECIFIC  
SUBJECTS IN SECONDARY SCHOOLS**

**ROSMA OSMAN.**

**FPP 2004 28**

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**By**

**ROSMA OSMAN**

**Thesis Submitted to the School of Graduate Studies, Universiti  
Putra Malaysia, in Fulfilment of the Requirements for the Degree  
of Doctor of Philosophy**

**August 2004**



## **DEDICATION**

**This thesis is dedicated to:**

My late parents for all their love and sacrifices

My brothers and sisters, nephews and nieces-you are  
the wind beneath my wings

Abstract of thesis presented to the Senate of Universiti Putra Malaysia  
in fulfilment of the requirements for the degree of Doctor of Philosophy

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**August 2004**

**Chairman : Ghazali Mustapha, Ph.D**

**Faculty : Educational Studies**

This research seeks to study thought processes among teachers teaching specific subjects in secondary schools. The research design was a descriptive correlational study and the data were collected using mailed questionnaires. The study employed the survey method. A stratified sampling technique was used to select 400 teachers. A response rate of 71.75% (287) was considered to be acceptable. Both the descriptive and inferential statistics were used to analyse the data.

The research finding showed that two-thirds of the teachers' thought processes was low. Almost one-third of the teachers were at the

intermediate-level and a very minimal percentage was high-level. There was no significant difference between regular and residential school teachers' thought processes. The result also suggested that the mean of Science and Mathematics teachers' thought processes scored significantly higher than Bahasa Melayu and Bahasa Inggeris teachers in their level of thought processes. However, teachers' professional qualification did not show any significant difference. With the exception of teachers' critical thinking disposition and teachers' concern, all the other variables did not correlate significantly with teachers' thought processes.

Multiple Regression Analysis showed that the significant predictors for teachers' thought processes in curriculum instruction are critical thinking disposition and teachers' concern. Based on the findings of the study, two new variables for educational change were proposed.

The study mainly recommended that policymakers should find means to improve teachers' level of commitment and emphasize moral purpose explicitly into the instructional objectives. This is because even if all the relevant factors for successful educational change are taken care of, the intended outcome will fail to occur if teachers are not committed and did not see that the change has professional value

to them. Finally, other recommendations for practice and future research were put forward.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra  
Malaysia sebagai memenuhi keperluan memperoleh ijazah Doktor  
Falsafah

**PROSES PEMIKIRAN DIKALANGAN GURU YANG MENGAJAR MATA  
PELAJARAN TERTENTU DI SEKOLAH MENENGAH**

**Oleh**

**ROSMA OSMAN**

**Ogos 2004**

**Pengerusi : Ghazali Mustapha Ph.D**

**Fakulti : Pengajian Pendidikan**

Penyelidikan ini bertujuan untuk mengkaji proses pemikiran di kalangan guru yang mengajar mata pelajaran tertentu di sekolah menengah di Malaysia. Reka bentuk penyelidikan adalah kajian korelasi deskriptif dan data dihipunkan melalui pos dengan menggunakan soal selidik. Kajian ini menggunakan kaedah tinjauan yang menggunakan teknik persampelan berstrata untuk memilih 400 guru. Kadar respon adalah 71.75% (287) dan dianggarkan memadai. Kedua-dua perangkaan deskriptif dan statistik inferensi digunakan untuk menganalisis data kajian.



Dapatan kajian menunjukkan bahawa proses pemikiran dalam pengajaran kurikulum oleh hampir dua pertiga jumlah guru adalah rendah. Hampir satu pertiga guru berada di tahap sederhana dan guru yang menggunakan kemahiran berfikir dalam pengajaran kurikulum pada tahap tinggi adalah sangat minima. Seterusnya, tidak ada perbezaan yang signifikan di antara guru sekolah menengah biasa dengan guru sekolah menengah berasrama penuh dari segi tahap proses pemikiran dalam pengajaran kurikulum. Dapatan juga menunjukkan bahawa skor min guru Sains dan guru Matematik adalah lebih signifikan berbanding guru Bahasa Melayu dan Bahasa Inggeris dalam proses pemikiran. Walaubagaimanapun, kelayakan professional guru tidak menunjukkan perbezaan signifikan dalam proses pemikiran. Semua pembolehubah tidak menunjukkan korelasi yang signifikan bagi tahap proses pemikiran dalam pengajaran kurikulum di sekolah, kecuali kecenderungan guru berfikir secara kritis dan keperihatinan guru.

Analisis regresi berbilang menunjukkan bahawa kecenderungan guru berfikir secara kritis dan keperihatinan guru merupakan faktor signifikan dalam proses pemikiran di kalangan guru yang mengajar mata pelajaran tertentu. Berdasarkan dapatan kajian, dua

pembolehubah baru untuk kejayaan pelaksanaan inovasi dalam pendidikan dicadangkan.

Kajian ini mencadangkan supaya pembuat dasar mencari cara yang terbaik untuk meningkatkan tahap komitmen guru dan menekankan tujuan murni secara eksplisit dalam objektif pengajaran. Ini kerana walaupun semua faktor yang berkaitan dengan kejayaan pelaksanaan inovasi dalam pendidikan diambil kira, namun hasil yang dihasratkan tidak akan tercapai jika guru tidak komited untuk melaksanakannya dan tidak nampak yang perubahan yang dihasratkan itu membawa nilai professional kepada mereka. Akhir sekali, dikemukakan juga cadangan lain untuk amalan dan penyelidikan selanjutnya.

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I certify that an Examination Committee met on 19<sup>th</sup> August 2004 to conduct the final examination of Rosma Osman on her Doctor of Philosophy thesis entitled "Thought Processes among Teachers Teaching Specific Subjects in Secondary Schools" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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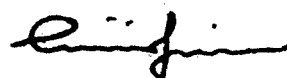
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## **DECLARATION**

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

  
**ROSMA OSMAN**  
Date: 16/3/05

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